



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,014	07/14/2006	Paul Oommen	873.0168.U1(US)	9330
29683 7590 07/06/2009 HARRINGTON & SMITH, PC 4 RESEARCH DRIVE, Suite 202 SHELTON, CT 06484-6212			EXAMINER THIER, MICHAEL	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 07/06/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,014	Applicant(s) OOMMEN, PAUL	
	Examiner MICHAEL T. THIER	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 24-43 and 47-50 is/are rejected.
- 7) ☒ Claim(s) 16-23 and 44-46 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 7/14/2006, 7/28/2008, 3/20/2009 have been entered and considered by the examiner.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 6, 7, 24-29, 31-36, and 47-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Cook et al. (US 6577614).

Regarding claims 1, 24, 25, 27, and 28. Cook teaches a method, apparatus and machine readable program (the examiner would like to note the use of the wording “A signal bearing medium tangibly embodying a program of machine readable instructions executable by...”, which has been considered to be statutory since a signal bearing medium is broad enough to encompass both statutory and non statutory media, however, the medium “tangibly” embodies the program, and the specification nowhere discloses the use of any non statutory medium (such as a transmission medium), and does specifically recite the use of a statutory medium, such as a memory as shown in claim 48 which clearly discloses the memory as containing the medium for tangibly embodying the program, and therefore is considered statutory) for (i.e. first server)

Art Unit: 2617

communicating with a mobile station in order for the mobile station to update a security-related parameter (abstract, column 2 lines 20-35, and column 3 lines 52-56), comprising:

a memory (column 3 lines 58-59, i.e. server holds the update parameters, and thus has a memory);

a processor (i.e. column 5 lines 39-49 and lines 58-66) the server and base station perform steps such as transmitting, receiving, and adding data service layers and protocols, and thus would inherently contain some processor);

determining that a request expressed in a first protocol has been made by a second server for updating the security-related parameter on the mobile station (figure 3 item 124, further column 2 lines 21-31, i.e. the base station (which is read on as the first server) receives an update parameter from the server (read on as the second server), and is configured to send the update parameter to the mobile. Therefore, the base station has determined that a request has been made by the second server (i.e. server of Cook) for updating a parameter of the mobile station. It can further be seen in column 3 lines 53-56 that the update parameters can be updates such as authentication, which clearly reads on a security related update parameter. Also, the first protocol idea can be understood from column 5 lines 28-32 and 39-50, i.e. IS-683 is a signaling protocol); and

in response to determining, packaging the request in a message expressed in a second protocol and communicating the message to the mobile station (figure 3 item 126, further column 2 lines 28-36 and column 5 line 58 to column 6 line 2, i.e. second

protocol is either IS-95 or IS-707 data channel standard, i.e. internet protocol).

Regarding claim 2. Cook further teaches wherein the first protocol comprises a signaling protocol (column 5 lines 32-45, i.e. IS-683-A) and the second protocol comprises an internet protocol (column 5 lines 58-64, i.e. IS-95 or IS-707).

Regarding claims 3, 31, and 32. Cook further teaches wherein the signaling protocol further comprises an over-the-air management protocol (column 5 lines 28-34, i.e. OTA using IS-683-A), and wherein the internet protocol further comprises an over-the-air internet protocol (column 5 lines 62-65, i.e. OTA using IS-95 or IS-707).

Regarding claims 4 and 33. Cook further teaches wherein the over-the-air management protocol comprises an IS-683 management protocol (column 5 lines 32-39), and the over-the-air internet protocol further comprises an Internet Protocol (IP)-based Over-The-Air (IOTA) Device Management protocol (column 5 lines 47-64, i.e. protocol selected from the TCP/IP protocol family, and further IS-95 and IS 707, where IS-707 is a known IP over CDMA protocol, thus an IOTA).

Regarding claims 6, 26, 34, 35, and 50. Cook further teaches wherein: the first and second protocols comprise different transport protocols (column 5 lines 28-62, first is IS-683, second is IS-95 or IS-707); the request is further expressed in a first management protocol (column 5 lines 27-50, IS-683 is the first management protocol); and packaging further comprises packaging the request in the message, where the message is expressed in a second management protocol in addition to the second protocol (column 5 lines 58-64, IS-95 management and IS-707 ip protocol).

Regarding claims 7 and 36. Cook further teaches wherein: the first and second protocols comprise different transport protocols (column 5 lines 27-63); the request comprises a trigger to cause the mobile station to begin operations to update the security-related parameter (column 5 line 65-column 6 lines 2, i.e. the mobile removes the layers to reveal the update parameter, thus can be read that some “trigger” was included to have the mobile perform these steps); and packaging further comprises packaging the request in the message, where the message is expressed in a management protocol in addition to the second protocol (column 5 lines 58-64).

Regarding claims 29, 47-49. Cook teaches a method and mobile station to update a security-related parameter (abstract), (the examiner would like to note the use of the wording “...a signal bearing medium tangibly embodying a program of machine readable instructions executable by...” in claim 48, which has been considered to be statutory. A signal bearing medium is broad enough to encompass both statutory and non statutory media, however, the medium “tangibly” embodies the program, and the specification nowhere discloses the use of any non statutory medium (such as a transmission medium), and does specifically recite the use of a statutory medium, such as a memory as shown in claim 48 which clearly discloses the memory as containing the medium for tangibly embodying the program, and therefore is considered statutory) comprising:

at least one memory (figure 2 item 72);

at least one processor coupled to the at least one memory configured to (column 5 lines 66 to column 6 line 2, i.e. steps such as receiving and removing layers are

Art Unit: 2617

perform and placing the parameters in memory, thus the mobile inherently contains some processor);

receiving a message expressed in a first protocol from a server and comprising a request for the mobile station to update the security related parameter, the request expressed in a second protocol (figure 3 item 126, further column 2 lines 21-36, i.e. the base station (which can be read on as the server) receives an update parameter from the server (can also be read on as the server), and is configured to send the update parameter to the mobile. Therefore, the mobile station has received a request from a server (i.e. from the base station, or even interpreted as from the server through the base station) server for updating a parameter of the mobile station. It can further be seen in column 3 lines 53-56 that the update parameters can be updates such as authentication, which clearly reads on a security related update parameter. Also, the first protocol idea can be understood from column 5 lines 28-32 and 39-50, i.e. IS-683 is a signaling protocol and the second protocol idea can be understood from column 5 line 58 to column 6 line 2, i.e. second protocol is the IS-95 or IS-707 data channel standard); and

performing, in response to the message, at least one operation in order to update the security related parameter. (column 5 line 66 to column 6 line 12, i.e. the mobile receives the update parameter and removes a number of layers to reveal the original updates)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 8-13, 30, 37-39, and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook et al. (US 6577614) in view of Ala-Laurila et al. (WO 01/39538).

Regarding claims 5 and 30. Cook teaches the limitations of the previous claims.

However, he does not specifically disclose determining that the mobile station has updated the security-related parameter, and communicating a response expressed in the second protocol to the second server, the response indicating that the mobile station has updated the security-related parameter.

Ala-Laurila teaches a system and method for updating security associations of a mobile during handover (title and abstract). He teaches the idea of determining that the mobile station has updated the security-related parameter (page 18 lines 29-30), and communicating a response expressed in the second protocol to the second server (page 18 line 30 to page 19 line 9), the response indicating that the mobile station has updated the security-related parameter (page 19 lines 5-9).

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to utilize the teachings as in Ala-Laurila with the teachings as in Cook.

The motivation for doing so would have been to provide an efficient way to maintain an established security association (Ala-Laurila page 9 lines 8-9)

Regarding claims 8-9, and 37-38. Ala-Laurila further teaches wherein the security-related parameter comprises an authentication key (i.e. and authentication key thus reads on a security key). (page 7 lines 16-22)

Regarding claims 10 and 39. Ala-Laurila further teaches wherein: the security-related parameter comprises one of an authentication key or a security key (page 7 lines 16-22); and Cook further teaches the security-related parameter is defined by a Code-Division Multiple Access (CDMA) standard (column 4 lines 45-52).

Regarding claims 11 and 41. Ala-Laurila further teaches communicating at least one additional message expressed in the second protocol to the mobile station (page 18 lines 23-24), the at least one additional message comprising at least one command defined to cause the mobile station to determine the security-related parameter (page 18 line 29 to page 19 line 3).

Regarding claims 12 and 42. Ala-Laurila further teaches communicating a first message and a second message expressed in the second protocol with the mobile station (figure 2 MAC_Authenticate_Req contains the first and second message, i.e. ap_response, ap_challenge, and other info), the first message comprising a first command defined to cause the mobile station to compute a first value (figure 2, i.e. response to ap_challenge is calculated, thus a value is calculated based on the first message), and the second message comprising a second value and a second command defined to cause the mobile station to compute the security-related parameter

by using the first and second values (figure 2, i.e. SA parameters are updated in response to the MAC_Authenticate_Req and if the ap challenge is successful).

Regarding claims 13 and 43. Cook further teaches wherein: the message is a first message (figure 3 item 126the update parameter of Cook reads on a first message); and Ala-Laurila further teaches the method further comprises :receiving a second message comprising an indication of a version of the security-related parameter (figure 3, HO request received at the new AP contains SA), the second message expressed in the second protocol (Cook column 5 lines 28-63 explains the first and second protocols); and communicating a third message, expressed in the first protocol and comprising the indication, to the second server (figure 3 HO_response reads on a third message).

6. Claims 14, 15, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook et al. (US 6577614) in view of Leung et al. (US 2004/0224666).

Regarding claims 14 and 40. Cook teaches the limitations of the previous claims.

However, he does not specifically disclose receiving an additional message comprising at least one parameter, the at least one parameter indicating whether or not the mobile station supports a certain provisioning protocol.

Leung teaches a system and method for network initiated parameter updating of a mobile station over the air (title and abstract). He teaches in column 7 lines 10-13 that the base station (i.e. server) receives a message that provides the protocol capabilities

Art Unit: 2617

of the mobile station. Therefore, this clearly reads on at least one parameter indicating whether the mobile station supports a certain protocol, since it notifies the protocol capabilities of the mobile.

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to utilize the teachings as in Leung with the teachings as in Cook. The motivation for doing so would have been to provide a secure method and apparatus for updating parameters in a mobile station. (Leung column 2 lines 59-61)

Regarding claim 15. Leung further teaches in response to the at least one parameter indicating that the mobile station does support the certain provisioning protocol, performing a first collection of steps (column 7 lines 11-25, after the mobile sends the protocol capability message a service program lock procedure is initiated, a password is compared and if it matches programming the mobile with appropriate information is performed, thus reading on performing steps after an indication that the mobile supports certain provisioning protocol (i.e. since the mobile provides its protocol capability); and in response to the at least one parameter indicating that the mobile station does not support the certain provisioning protocol, performing a second collection of steps (column 7 lines 21-25, i.e. should the password be correct the OTA programming is allowed, thus if the password is not correct it is not allowed, and thus a second collection of steps is performed as compared to the first steps when the password is correct).

Allowable Subject Matter

7. Claims 16-23, and 44-46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL T. THIER whose telephone number is (571)272-2832. The examiner can normally be reached on Monday thru Friday 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MICHAEL T THIER/
Examiner, Art Unit 2617
6/30/2009